



**Rocky Mountain  
Remediation Services, L.L.C.**  
... protecting the environment

Rocky Flats Environmental Technology Site  
P.O. Box 464  
Golden, Colorado 80402-0464  
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March 18, 1999

Karan S. North, Division Manager  
Environmental Systems and Stewardship  
Kaiser-Hill Company, L.L.C.  
Building T130C

**PHASE I SUMMARY REPORT FOR TANK AND ANCILLARY EQUIPMENT  
SYSTEM #5 IN BUILDING 771 - TAH-013-99**

Pursuant to the *RCRA Closure Plan for Interim Status Units* (April 1998) (Closure Plan) and the *Closure Description Document for Tank and Ancillary Equipment System #5* (98-RF-05726), Rocky Mountain Remediation Services is submitted the attached *Summary Report of Phase I RCRA Closure Activities for Tank and Ancillary Equipment System #5 in Building 771*.

The summary report contains a description of major closure activities and a declaration that one of the tanks in this system meets the requirements for the "RCRA Stable" condition.

Please transmit this Summary Report to CDPHE at your earliest convenience. A draft letter to CDPHE is attached for your use.

If you have questions, please contact me at 303-966-7652 or Tom Baker at 303-966-4329.

*Bob Cathel for*

Ted A. Hopkins  
Environmental Compliance Manager

TCB:dlu

Attachments (2):  
As Stated

CORRES. CONTROL		
LTR. NO.		
K-H Corres. #		
99-RF-		
Originator Ltr Log #		
TAH-013-99		
DIST.	LTR	ENC
BODEY, E. D.		
CARMEAN, C.H.		
CRAWFORD, A.C.		
FINDLEY, M.E.		
FITZ, R.C.		
GUINN, L.A.		
HUGHES, F.P.		
KASEN, J.A.		
KORENKO, M.K.		
LAW, J.E.		
MILLS, S.H.		
OVERUD, T.W.		
PATTERSON, J.W.		
SUTTON, S.R.		
TRICE, K.D.		
WHEELER, M.		
WOLF, K.Z.	X	
WOLF, H.C.	X	
BAKER, I.	X	X
HOPKINS, T.	X	X
LANGLOIS, L.	X	X
BURKS, D.	X	
ARNOLD, P.S.	X	X
ADMIN RECORD		
RMRS RECORDS	X	X
TRAFFIC		
PATS/T130G		
CLASSIFICATION:		
UCNI		
UNCLASSIFIED	X	X
CONFIDENTIAL		
SECRET		
AUTHORIZED CLASSIFIER		
SIGNATURE:		
<i>Ted A. Hopkins</i>		
Date:	3/17/99	
IN REPLY TO RF CC NO.:		
ACTION ITEM STATUS:		
q PARTIAL/OPEN		
q CLOSED		
LTR APPROVALS:		
ORIG. & TYPIST INITIALS:		
TCB:dlu		
RF-46469(Rev. 1/99)		



ADMIN RECORD  
IA-B771-A-00023 1/5

DRAFT

DRAFT

DRAFT

99-RF-XXXXX  
DOE # xxxxx

Mr. Joe Scheiffelin, Unit Leader  
Colorado Department of Public Health and the Environment  
4300 Cherry Creek Drive South  
Denver, Colorado 80246-1530

PHASE I SUMMARY REPORT FOR TANK AND ANCILLARY EQUIPMENT SYSTEM #5 IN  
BUILDING 771 - KSN-XXX-99

Dear Mr. Scheiffelin:

Pursuant to the *RCRA Closure Plan for Interim Status Units* (April, 1998) (Closure Plan) and the *Closure Description Document for Tank and Ancillary Equipment System #5 in Building 771* (98-RF-05726), Kaiser-Hill Company, L.L.C. is submitting the enclosed *Summary Report of Phase I RCRA Closure Activities for Tank and Ancillary Equipment System #5 in Building 771*.

The Summary Report contains a description of major closure activities and a declaration that one of the tanks in this system meets the requirements for the "RCRA Stable" condition.

If you have any questions, please contact Tom Baker of Rocky Mountain Remediation Services at 303-966-4329.

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Karan S. North, Division Manager    Date  
Environmental Systems and Stewardship  
Kaiser-Hill Company, L.L.C.

cc:

C. Gilbreath	-	CDPHE
D. Grosek	-	DOE, RFFO
T.C. Baker	-	RMRS
R.L. Cathel	-	RMRS
T. A. Hopkins	-	RMRS
R.M. Leitner	-	Savant Enterprises
N. C.T. Van Tyne	-	ICF Kaiser

**Phase I Summary Report of**  
**RCRA Closure Activities for**  
**Tank and Ancillary Equipment System #5**  
**in Building 771**

**U.S. Department of Energy**  
**Rocky Flats Environmental Technology Site**  
**EPA ID No. CO7890010526**

**Confirmed and Approved by:**

T.C. Baker  
T.C. Baker, Environmental Compliance, RMRS

3/18/99  
Date

**Prepared by:**

N.C.T. Van Tyne  
N.C.T. Van Tyne, Project Manager II, ICF Kaiser

3/18/99  
Date

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## 1.0 PURPOSE

This Summary Report for Phase I activities in the RCRA closure of Tank and Ancillary Equipment System #5 is a requirement of Section 1.2 of the Closure Description Document (CDD) for this system (98-RF-05726). The major features of this report include a declaration that the piping described in the document was removed as planned, a description of major closure activities and any deviations from those stated in the document, a copy of any newly-generated drawings and relevant analytical results, and a statement regarding whether the tanks included in this system have met the requirements of the "RCRA Stable" condition.

## 2.0 DESCRIPTION OF MAJOR CLOSURE ACTIVITIES

All sections of process piping for System #5 indicated in the CDD, Figures 2-4, were removed under IWCP work package number T0095099. This removal was confirmed through pre-job and post-job walkdowns of the system.

Piping removal was mainly accomplished by using a 4-wheel cutter inside a sleeve or T-sleeve to cut the pipe wall until separation was almost achieved. The cutter was then removed, the sleeve was taped, the pipe was manually separated, and the sleeve was closed in a pigtail formation to secure all pipe ends. In a few locations, a Sawz-All™ was used to separate pipe sections because of space considerations. The drain line on tank T-21 was sealed with a blind flange, and short pipe stubs were left at all other Termination Points (TPs). A small amount of dry absorbent was placed inside the outer bag at the pipe stub TPs.

The pipe sections were inspected visually by looking through them from one end after they were size reduced. No blockages were found in any sections and the pipe interiors appeared to be dry. The sections were characterized as non-hazardous low-level waste and were placed into waste crates.

Solid deposits of aluminum nitrate crystals were expected in this system as well as a 60% aluminum nitrate solution. Instead, a nitric acid solution was recovered. Analyses of confirmatory samples indicated the presence of a 4.5N nitric acid solution with pH<1. Apparently, the original aluminum nitrate solution was diluted with nitric acid. This conclusion would also explain why all five sampling locations indicated in the Closure Description Document were found to be clear, with no solid residual material to be recovered.

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A total of 94 liters of liquid were recovered and transferred into tank D-544. Of this total, 5.75 liters of liquid were recovered in two bottles during piping removal activities. The contents of tank D-544 will be fully characterized prior to disposal.

### **3.0 TANK STATUS WITH RESPECT TO THE "RCRA STABLE" CONDITION**

Tank T-21 is included in the Idle Equipment Inventory with ID number 771-0003. This tank now meets the requirements for the "RCRA Stable" condition as follows:

1. The tank is empty of liquids and mobile sludges in that no additional liquid could be extracted from the tap on the drain line at the bottom of the tank during a period of five minutes of continuous pumping. There was no indication of additional residual material inside the tank.
2. All process piping connected to the tank has been removed; only the vent line remains connected.
3. The drain line TP at the tank has been blind flanged and the fill line has been sealed, so that no liquid can be re-introduced into the tank.

This tank will continue to be maintained per the requirements of the Idle Equipment Program. Its current condition will be recorded in the Idle Equipment Inventory as appropriate.

### **4.0 SUMMARY**

The requirements of the CDD for Phase I activities in the RCRA closure of System #5 in Building 771 have been fulfilled as stated in the document. In addition, tank T-21 meets the requirements of the "RCRA Stable" condition, but will remain in the Idle Equipment Inventory and will follow its inspection requirements.